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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/769,670	01/25/2001	Roy B. Carpenter JR.	RM26ii	5405
23996	7590	06/23/2005	EXAMINER	
RICK MARTIN PATENT LAW OFFICES OF RICK MARTIN, PC 416 COFFMAN STREET LONGMONT, CO 80501			PATEL, DHIRUBHAI R	
			ART UNIT	PAPER NUMBER
			2831	

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/769,670

Applicant(s)

CARPENTER, ROY B. 

Examiner

DHIRU R. PATEL

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/23/05</u> <u>DRP</u> . | 6) <input type="checkbox"/> Other: ____.  |

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## **DETAILED ACTION**

### ***Response to Amendment***

1. *The amendment filed on 2/3 /05 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows : (about one microsecond for the initial surge of current flow to rise to the peak; however the current flow lasts for an average of 20 microseconds), the average inpedance of these connection is between 150 and 500 ohms at lighting frequencies depending on the tank diameter. Applicant is required to cancel the new matter in the reply to this Office action.*

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103 (a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. Claims 1-30 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over J. B. Godwin JR (3,453,493) in view of Landis et al (3,887,254) and Peil (4,806,937).

J. B. Godwin JR disclose:

Regarding claims 1 and 18, in a fluid/liquid storage tank 10 with a sidewall (see fig 1 and entire column 2) and a floating roof 16 ( see fig 1 and entire columns 2-3) floating atop the fluid/liquid (see fig 1,) , and conductor 20 being connected to the floating roof ( see fig 1) and also, disclosed that the material of the cable 20 is optional (see column 2 lines 25-30), but fails to disclose a reel connected to the sidewall as well as the conductor having a low impedance. Landis et al teach the use of a reel 2 with a flexible grounding cable 3 (see 1 and entire column 1) , and Peil teach the use of a low impedance copper conductor in order to deliver large amounts of high frequency power over distance of several feet within a few micro-seconds (see column 18 lines 58-65 ). It is well known in the electrical art to use a low impedance copper conductor as evidenced by Peil, therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the conductor 20 of the assembly of J. B. Godwin with a low impedance copper conductor and provide a reel being connected to the sidewall as taught by Peil and Landis respectively in order to self-rewind the conductor as the floating roof 16 rises and falls in the tank and also, to deliver large amounts of high frequency power over distance of several feet within a few micro-seconds during electrical faults . With respect to claim 18, the modified assembly of J.B. Godwin meet the structural limitations.

Regarding claim 8, a storage tank 10 having a floating roof 16 (see fig 1 and entire columns 1-2) , and a wire 20 having an end connected to the floating roof (see fig 1), but fails

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to disclose said wire having a second end wound around a spool in a reel and said wire having a low impedance as well as said reel having a connection to a wall segment of the tank. Landis et al teach the use of a reel 2 with a flexible grounding cable 3 (see 1 and entire column 1), and Peil teach the use of a low impedance copper conductor in order to deliver large amounts of high frequency power over distance of several feet within a few micro-seconds (see column 18 lines 58-65). It is well known in the electrical art to use a low impedance copper conductor as evidenced by Peil, therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the conductor 20 of the assembly of J. B. Godwin with a low impedance conductor and provide a reel being connected to the sidewall as taught by Peil and Landis respectively in order to self-rewind the conductor as the floating roof 16 rises and falls in the tank and also, to deliver large amounts of high frequency power over distance of several feet within a few micro-seconds during electrical faults.

Regarding claim 12, a tank 10 with a floating roof 16 (see fig 1 and entire columns 1-2) to an upper segments of a tank (see fig 1), and conductor 20 having and connected from the floating roof to an upper segment of a tank (see fig 1), but fails to disclose said cable having a low impedance and means for taking slack out of a cable connected from a floating roof to an upper segment of a tank wall. Landis et al teach the use of a means 2 with a flexible grounding cable 3 (see 1 and entire column 1), and Peil teach the use of a low impedance copper conductor in order to deliver large amounts of high frequency power over distance of several feet within a few micro-seconds (see column 18 lines 58-65). It is well known in the electrical art to use a low impedance copper conductor as evidenced by Peil, therefore, it

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would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the conductor 20 of the assembly of J. B. Godwin with a low impedance conductor and provide a means being connected to the sidewall as taught by Peil and Landis respectively in order to self-rewinding the conductor as the floating roof 16 rises and falls in the tank and also, to deliver large amounts of high frequency power over distance of several feet within a few micro-seconds during electrical faults .

Regarding claims 2 and 19, the modified assembly of the J. B. Godwin disclose all the features of the claimed invention as shown above, including the reel further comprises a take up spool which keeps any slack out of the conductor and maintains a shortest fractional length. It is noted that the modified assembly of the J. B. Godwin meets the structural limitations.

Regarding claims 3 and 20, the modified assembly of the J. B. Godwin disclose all the features of the claimed invention as shown above, including the take up spool further comprises a spring (inherent properties because the reel is self-rewinding reel).

Regarding claims 4, 15 and 21, the modified assembly of the J. B. Godwin disclose all the features of the claimed invention as shown above, including the wire further comprises a bare braided copper cable or a braided conductor. It is noted that the modified assembly of the J. B. Godwin meets the structural limitations.

Regarding claims 5 and 22, the modified assembly of the J. B. Godwin disclose all the features of the claimed invention as shown above, including further comprises a base and bolts 7 (see fig 1 of Godwin).

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Regarding claims 6 and 23, see fig 1 and entire columns 1-2 of J. B. Godwin .

Regarding claims 7,11, 16, 24 and 29-30, the modified assembly of the J. B. Godwin disclose all the features of the claimed invention as shown above. It is noted that the modified assembly of the J. B. Godwin meets the structural limitations.

Regarding claim 9, the modified assembly of the J. B. Godwin discloses all the features of the claimed invention as shown above, including the wire further comprises a flat braided copper cable. It is noted that the modified assembly of the J. B. Godwin meets the structural limitations.

Regarding claim 10, the modified assembly of the J. B. Godwin discloses all the features of the claimed invention as shown above, including the reel further comprises a take up mechanism to minimize slack in the conductor. It is noted that the modified assembly of the J. B. Godwin meets the structural limitations.

Regarding claim 13, the modified assembly of the J. B. Godwin disclose all the features of the claimed invention as shown above, including the means of taking slack out further comprises a reel having a take up spool . It is noted that the modified assembly of the J. B. Godwin meets the structural limitations.

Regarding claim 14, the modified assembly of the J. B. Godwin disclose all the features of the claimed invention as shown above, including the take up spool further comprises a spring functioning to constantly pull up on the cable . It is noted that the modified assembly of the J. B. Godwin meets the structural limitations.

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Regarding claim 17, the modified assembly of the J. B. Godwin discloses all the features of the claimed invention as shown above. It is noted that the modified assembly of the J. B. Godwin meets the structural limitations.

Regarding claim 25, the modified assembly of the J. B. Godwin disclose all the features of the claimed invention as shown above, but fails to disclose a plurality of said reels. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide any number of said reels, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding claim 26, the modified assembly of the J. B. Godwin disclose all the features of the claimed invention as shown above, but fails to disclose a plurality of said reels . It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide any number of said reels ,since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding claim 27, the modified assembly of the J. B. Godwin disclose all the features of the claimed invention as shown above, but fails to disclose a plurality of said means. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide any number of said means, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.



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Regarding claim 28, the modified assembly of the J. B. Godwin disclose all the features of the claimed invention as shown above, but fails to disclose a plurality of said reels. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide any number of said reels, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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**Contact information**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dhiru Patel whose telephone number is 571-272-1983. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pairedirect.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

Dhiru Patel  
Primary Examiner  
Group Art Unit 2831  
June 22, 2005

  
DHIRU R. PATEL  
PRIMARY EXAMINER  
6/22/05